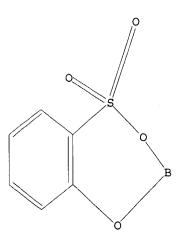
=> d L10 HAS NO ANSWERS L10 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 110

REG1stRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress... Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

SAMPLE SEARCH INITIATED 13:34:47 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED -1 TO ITERATE

1 ITERATIONS 1 ANSWERS 100.0% PROCESSED

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE** BATCH **COMPLETE** PROJECTED ITERATIONS: 1 TO 80 1 TO PROJECTED ANSWERS: 80

1 SEA SSS SAM L10 L11

1 L11 L12

=> file reg COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 472.97 FULL ESTIMATED COST 0.44

FILE 'REGISTRY' ENTERED AT 13:34:52 ON 26 MAY 2004 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2004 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 25 MAY 2004 HIGHEST RN 685826-98-6 DICTIONARY FILE UPDATES: 25 MAY 2004 HIGHEST RN 685826-98-6

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> s 110

SAMPLE SEARCH INITIATED 13:34:55 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 1 TO ITERATE

100.0% PROCESSED 1 ITERATIONS 1 ANSWERS SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
PROJECTED ITERATIONS: 1 TO 80
PROJECTED ANSWERS: 1 TO 80

L13 1 SEA SSS SAM L10

=> d

L13 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN

RN 146817-09-6 REGISTRY

CN Borate(1-), bis[2-hydroxy-4-methylbenzenesulfonato(2-)-01,02]-, (T-4)-, hydrogen, compd. with N,N-dibutyl-1-butanamine (1:1) (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Butanamine, N,N-dibutyl-, (T-4)-bis[2-hydroxy-4-methylbenzenesulfonato(2-)-01,02]borate(1-) (9CI)

MF C14 H12 B O8 S2 . C12 H27 N . H

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent RL.P Roles from patents: USES (Uses)

CM 1

CRN 146817-08-5 CMF C14 H12 B O8 S2 . H CCI CCS

● H+

CM 2

CRN 102-82-9 CMF C12 H27 N

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file caplus
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 2.19 475.16

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 13:35:06 ON 26 MAY 2004 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 26 May 2004 VOL 140 ISS 22 FILE LAST UPDATED: 25 May 2004 (20040525/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d ibib abs hitstr

L14 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1993:179996 CAPLUS

DOCUMENT NUMBER: 118:179996

TITLE: Image-forming method using toner containing boron

compound charge-controlling agent

INVENTOR(S): Hagiwara, Tomoe; Kuramoto, Shinichi; Orihara, Motoi

PATENT ASSIGNEE(S): Ricoh Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 04256963 A2 19920911 JP 1991-39420 19910208

PRIORITY APPLN. INFO.: JP 1991-39420 19910208

OTHER SOURCE(S): MARPAT 118:179996

GΙ

$$\begin{bmatrix} x_1 & & & & \\ x_1 & & & & \\ & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\$$

AB In an image-forming method in which many elec. microfield are formed on a developer-carrying substance and the latent images are developed with a one-component type developer carried on the substance, which is prepared by optionally and externally adding adjuncts to a toner, the toner contains a binder resin, a coloring agent, and a B compound I and/or II [R1 = H, alkyl, alkoxy, halo, aromatic ring (including condensed ring); R2 = H, alkyl, alkoxy, halo; X1 = O, S, SO3, SO2NR3, NR3; X2 = CO2, CONR3, SO3, SO2NR3, O, S, NR3; Y1-2 = O, S, NR3 (R3 = H, alkyl); Z+ = cation; k, l, m, n = 1-4] as a charge-controlling agent. The method is able to form ≥2 toner layers uniformly and prevents toner-filming phenomena. Thus, styrene-acrylic copolymer, polypropylene, carbon black, and borodicatechol dimethylammonium were kneaded, pulverized, and mixed with colloidal silica to give a toner, which gave high d. images without fog in continuously repeated copying.

Ι

II

IT 146817-09-6

RL: USES (Uses)

(charge-controlling agent, electrophotog. developer toner containing) 146817-09-6 CAPLUS

RN 146817-09-6 CAPLUS
CN Borate(1-), bis[2-hydroxy-4-methylbenzenesulfonato(2-)-01,02]-, (T-4)-, hydrogen, compd. with N,N-dibutyl-1-butanamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 146817-08-5

CMF C14 H12 B O8 S2 . H

CCI CCS

● H+

CM 2

CRN 102-82-9 CMF C12 H27 N

=> sel rn
E1 THROUGH E8 ASSIGNED

=> file reg COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION 480.44 5.28 FULL ESTIMATED COST DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION -0.69 -0.69

CA SUBSCRIBER PRICE -0.69

FILE 'REGISTRY' ENTERED AT 13:35:50 ON 26 MAY 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

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STRUCTURE FILE UPDATES: 25 MAY 2004 HIGHEST RN 685826-98-6 DICTIONARY FILE UPDATES: 25 MAY 2004 HIGHEST RN 685826-98-6

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

```
=> s e1-e8
             1 146817-07-4/BI
                 (146817-07-4/RN)
             1 146817-09-6/BI
                 (146817-09-6/RN)
             1 146817-11-0/BI
                 (146817-11-0/RN)
             1 146817-13-2/BI
                 (146817-13-2/RN)
             1 146817-15-4/BI
                 (146817-15-4/RN)
             1 146996-07-8/BI
                 (146996-07-8/RN)
             1 53992-90-8/BI
                 (53992-90-8/RN)
             1 53993-03-6/BI
                 (53993-03-6/RN)
L15
             8 (146817-07-4/BI OR 146817-09-6/BI OR 146817-11-0/BI OR 146817-13
               -2/BI OR 146817-15-4/BI OR 146996-07-8/BI OR 53992-90-8/BI OR
               53993-03-6/BI)
=> s 115 and b/els
        330098 B/ELS
             8 L15 AND B/ELS
=> s 116 and s/21s
'2LS' IS NOT A VALID FIELD CODE
             0 S/2LS
             0 L16 AND S/2LS
L17
=> s l16 and s/els
       5983159 S/ELS
             2 L16 AND S/ELS
1.18
=> d scan
                REGISTRY COPYRIGHT 2004 ACS on STN
L18 2 ANSWERS
     Borate(1-), bis[2-hydroxy-4-methylbenzenesulfonato(2-)-O1,O2]-, (T-4)-,
     hydrogen, compd. with N, N-dibutyl-1-butanamine (1:1) (9CI)
     C14 H12 B O8 S2 . C12 H27 N . H
MF
     CM
          1
```

● H+

CM 2

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L18 2 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN Borate(1-), bis[2-aminobenzenesulfonato(2-)-N,O]-, (T-4)-, hydrogen,
 compd. with N-ethylethanamine (1:1) (9CI)

MF C12 H10 B N2 O6 S2 . C4 H11 N . H

CM 1

● H+

CM 2

 $_{\rm H_3C^-CH_2^-NH^-CH_2^-CH_3}$

ALL ANSWERS HAVE BEEN SCANNED

=> file reg
COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)
SINCE FILE TOTAL
ENTRY SESSION

0.00

-0.69

FILE 'REGISTRY' ENTERED AT 13:36:37 ON 26 MAY 2004 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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STRUCTURE FILE UPDATES: 25 MAY 2004 HIGHEST RN 685826-98-6 DICTIONARY FILE UPDATES: 25 MAY 2004 HIGHEST RN 685826-98-6

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> d his

(FILE 'HOME' ENTERED AT 13:27:54 ON 26 MAY 2004)

FILE 'CAPLUS' ENTERED AT 13:28:00 ON 26 MAY 2004

FILE 'REGISTRY' ENTERED AT 13:28:02 ON 26 MAY 2004

L1 STRUCTURE UPLOADED

L2 0 S L1

CA SUBSCRIBER PRICE

L3 0 S L1 FULL

L4 STRUCTURE UPLOADED

L5 0 S L4

L6 0 S L4 FULL

L7 STRUCTURE UPLOADED

L8 0 S L7

L9 1 S L7 FULL

FILE 'CAPLUS' ENTERED AT 13:32:14 ON 26 MAY 2004 L10 STRUCTURE UPLOADED S L10

FILE 'REGISTRY' ENTERED AT 13:34:47 ON 26 MAY 2004 L11 1 S L10

FILE 'CAPLUS' ENTERED AT 13:34:47 ON 26 MAY 2004 L12 1 S L11

FILE 'REGISTRY' ENTERED AT 13:34:52 ON 26 MAY 2004 L13

FILE 'CAPLUS' ENTERED AT 13:35:06 ON 26 MAY 2004

L14 1 S L11 SEL RN

FILE 'REGISTRY' ENTERED AT 13:35:50 ON 26 MAY 2004

L15 8 S E1-E8

L16 8 S L15 AND B/ELS L17 0 S L16 AND S/2LS L18 2 S L16 AND S/ELS

FILE 'REGISTRY' ENTERED AT 13:36:37 ON 26 MAY 2004

=> s 110 full

FULL SEARCH INITIATED 13:36:51 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 13 TO ITERATE

100.0% PROCESSED 13 ITERATIONS 5 ANSWERS

SEARCH TIME: 00.00.01

L19 5 SEA SSS FUL L10

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST

155.42
645.14

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION

CA SUBSCRIBER PRICE 0.00 -0.69

FILE 'CAPLUS' ENTERED AT 13:36:55 ON 26 MAY 2004 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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FILE COVERS 1907 - 26 May 2004 VOL 140 ISS 22 FILE LAST UPDATED: 25 May 2004 (20040525/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l19

L20 8 L19

=> d ibib abs hitstr 1-8

L20 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:582287 CAPLUS

DOCUMENT NUMBER: 135:155240

TITLE: Inorganic gel-polymer electrolyte

INVENTOR(S): Ehrlich, Grant M.

PATENT ASSIGNEE(S): Yardney Technical Products, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 12 pp., Cont.-in-part of U.S.

6,203,949. CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO. DATE
US 2001012590	A1	20010809	US 2001-808794 20010315
US 6599664	B2	20030729	
US 6203949	B1	20010320	US 1998-137492 19980821
PRIORITY APPLN. INFO.	:		US 1997-56740P P 19970822
			US 1998-137492 A2 19980821

AB An anhydrous inorg. gel-polymer electrolyte is prepared using a nonaq. sol-gel process. The inorg. gel-polymer is prepared by reacting a metal halide (SiCl4) and an alc. (tert-Bu alc.) in a diluent solution containing a lithium salt (lithium bisperfluoroethanesulfonimide) and at least one carbonate. The resulting porous silicon oxide network encapsulates the liquid electrolyte. The gel polymer electrolyte can serve as both a separator and an electrolyte in a Li-ion cell. The material is stable and has demonstrated minimal flammability. Lithium-ion electrochem. cells made with the inorg. gel-polymer electrolyte function similarly to Li-ion cells made with a liquid electrolyte. The cells have low capacity fade, 0.69%, and low irreversible capacity, 7.6%.

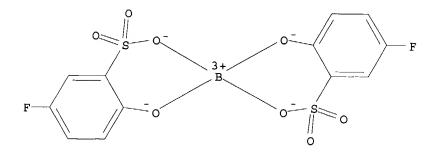
IT 201536-28-9

RL: DEV (Device component use); USES (Uses)

(inorg. gel-polymer electrolyte for lithium secondary batteries)

RN 201536-28-9 CAPLUS

CN Borate(1-), bis[5-fluoro-2-(hydroxy-κ0)benzenesulfonato(2-)κ0]-, lithium, (T-4)- (9CI) (CA INDEX NAME)



● Li+

L20 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:195122 CAPLUS

DOCUMENT NUMBER: 134:210600

TITLE: Solid electrolyte for an electrochemical cell composed

of an inorganic metal oxide network encapsulating a

liquid electrolyte Ehrlich, Grant M.

PATENT ASSIGNEE(S): Yardney Technical Products, Inc., USA

SOURCE: U.S., 7 pp.
CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

INVENTOR (S):

PATENT NO.	KIND	DATE	APPLICATION NO. DATE
US 6203949	B1	20010320	US 1998-137492 19980821
US 2001012590	Al	20010809	US 2001-808794 20010315
US 6599664	B2	20030729	
US 2001010881	A1	20010802	US 2001-810297 20010316
US 6558850	B2	20030506	
PRIORITY APPLN. INFO.	;		US 1997-56740P P 19970822
			US 1998-137492 A2 19980821

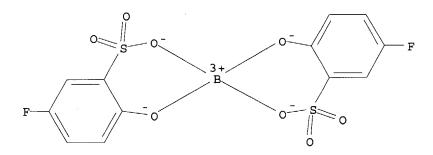
A solid polymer electrolyte for an electrochem. cell is prepared by a AΒ sol-gel process in which an active metal ion conducting liquid electrolyte, e.g. a lithium-ion electrolyte, containing a salt which is stable in the presence of water, e.g. lithium bisperfluoroethanesulfonimide, is admixed in aqueous solution with an alkoxide, e.g. silica alkoxide, to form a liquid precursor which is added to the electrochem. cell between the anode and cathode thereof and allowed to solidify in situ to form the solid electrolyte.

IT 201536-28-9

> RL: DEV (Device component use); USES (Uses) (solid electrolyte for electrochem. cell composed of inorg. metal oxide network encapsulating liquid electrolyte)

201536-28-9 CAPLUS RN

Borate(1-), bis[5-fluoro-2-(hydroxy-κ0)benzenesulfonato(2-)-CNκO]-, lithium, (T-4)- (9CI) (CA INDEX NAME)



Li+

REFERENCE COUNT:

6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2001:28524 CAPLUS

DOCUMENT NUMBER:

134:94760

TITLE:

Procedure for the production of lithium

(olatobenzenesulfonato) borate complex salts and their

use in electrochemical cells

INVENTOR(S):

Schmidt, Michael; Demeijere, Armin; Leonov, Andrej

Merck Patent G.m.b.H., Germany

PATENT ASSIGNEE(S): SOURCE:

Ger. Offen., 8 pp.

CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-			
DE 19932317	A1	20010111	DE 1999-19932317	19990710

20000629 EP 2000-113144 EP 1069128 A2 20010117 EP 1069128 A3 20020619 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO JP 2000-203763 20000705 JP 2001055396 20010227 A2 CN 1280130 CN 2000-120406 20000706 Α 20010117 20000710 BR 2000002667 BR 2000-2667 Α 20010313 20000710 US 2000-613293 US 6441216 В1 20020827 20020710 US 2003028023 US 2002-191479 A1 20030206 US 6657072 B2 20031202 20031031 US 2004091785 US 2003-697046 A1 20040513 DE 1999-19932317 A 19990710 PRIORITY APPLN. INFO.: US 2000-613293 A3 20000710 US 2002-191479 A3 20020710 OTHER SOURCE(S): MARPAT 134:94760

GI

Ι

The invention concerns a procedure for the production of borate lithium AΒ complex salts I (R1, R2 = aryl, substituted aryl; R3-R6 = halo, C1-6 alkyl, alkoxy, aryl, etc.) and their application in electro-chemical cells. Thus, reaction of 5-fluoro-2-hydroxybenzenesulfonic acid with Me3SiCl gave 5-fluoro-2-trimethylsilyloxybenzenesulfonic acid trimethylsilyl ester which on treatment with lithium tetramethanolatoborate gave title compound, lithium bis[5-fluoro-2-olatobenzenesulfonato(2-)0,0']borate(1-).

316829-03-5P IT

RN

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (preparation and oxidation stability of)

316829-03-5 CAPLUS

Borate(1-), [5-fluoro-3-(hydroxy-κO)benzenesulfonato(2-)-CN κO]dimethoxy-, lithium, (T-4)- (9CI) (CA INDEX NAME)

▶ Li+

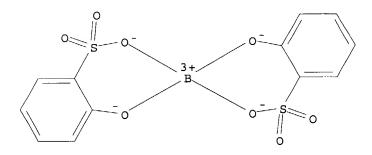
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ACCESSION NUMBER:
                       2000:645789 CAPLUS
DOCUMENT NUMBER:
                        133:225580
                       Use of additives in electrolytes for improved
TITLE:
                        performance of electrochemical cells
                       Heider, Udo; Schmidt, Michael; Amann, Anja; Niemann,
INVENTOR(S):
                       Marlies; Kuhner, Andreas
                       Merck Patent G.m.b.H., Germany
PATENT ASSIGNEE(S):
                       Eur. Pat. Appl., 26 pp.
SOURCE:
                        CODEN: EPXXDW
DOCUMENT TYPE:
                       Patent
LANGUAGE:
                        German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
                                       APPLICATION NO. DATE
                 KIND DATE
    PATENT NO.
    ______
    EP 1035612 A1 20000913 EP 2000-102355 20000204
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO
                                         DE 1999-19910968 19990312
                    A1 20001109
    DE 19910968
    JP 2000268863
                     A2
                          20000929
                                        JP 2000-41336
                                                         20000218
    WO 2000055935
                     A1
                          20000921
                                        WO 2000-EP1611
                                                        20000226
        W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
            CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
            IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
            MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK,
            SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, BF, BJ, CF, CG, CI,
            CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                    A 20011218
                                        BR 2000-8938
    BR 2000008938
                                                         20000226
    TW 522581
                     В
                         20030301
                                         TW 2000-89104088 20000307
                     B1 20030415
                                        US 2000-524922 20000313
    US 6548212
                    A1 20031211
                                        US 2003-372084
    US 2003228524
                                                         20030225
                                      DE 1999-19910968 A 19990312
PRIORITY APPLN. INFO.:
                                      WO 2000-EP1611 W 20000226
                                      US 2000-524922 A3 20000313
OTHER SOURCE(S):
                        MARPAT 133:225580
    Battery electrolyte comprising an aprotic solvent with dissolved Li containing
AB
    inorg. or organic salts from the group of methanides, triflates, and imides
    includes ≥1 0, eg. alkali metal salt additive. The additive is
    selected from the groups of organic alkali metal borate or alkali metal
    alcoholate.
ΙT
    201536-28-9 227099-53-8
    RL: MOA (Modifier or additive use); USES (Uses)
        (use of additives in electrolytes for improved performance of
       electrochem. cells)
    201536-28-9 CAPLUS
RN
    Borate(1-), bis[5-fluoro-2-(hydroxy-κ0)benzenesulfonato(2-)-
CN
    κO]-, lithium, (T-4)- (9CI) (CA INDEX NAME)
```

L20 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN

• Li+

RN 227099-53-8 CAPLUS

CN Borate(1-), bis[2-(hydroxy- κ 0)benzenesulfonato- κ 0]-, lithium, (T-4)- (9CI) (CA INDEX NAME)



● Li+

REFERENCE COUNT:

9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2000:384640 CAPLUS

DOCUMENT NUMBER:

133:20102

TITLE:

Non-aqueous electrolyte secondary battery with

improved anode and its charging method

INVENTOR(S):

Iwamoto, Kazuya; Koshina, Hizuru; Shimamura, Harunari;

Nitta, Yoshiaki

PATENT ASSIGNEE(S):

Matsushita Electric Industrial Co., Ltd., Japan

SOURCE: PCT Int. Appl., 35 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000033403	A1	20000608	WO 1999-JP6689	19991130
W: US				
RW: AT, BE,	CH, CY	, DE, DK, ES	, FI, FR, GB, GR, IE	, IT, LU, MC, NL,
PT, SE				
JP 2000173652	A2	20000623	JP 1998-342887	19981202
JP 2000173589	A2	20000623	JP 1998-342888	19981202
EP 1052714	A1	20001115	EP 1999-973177	19991130

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

PRIORITY APPLN. INFO.:

JP 1998-342887 A 19981202 JP 1998-342888 A 19981202 WO 1999-JP6689 W 19991130

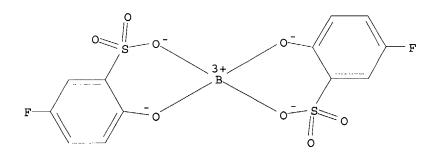
AB The nonaq. electrolyte secondary battery is characterized in that the neg. plate is made chiefly of composite particles of which at least part of the core particles containing ≥1 kind among Sn, Si, and Zn as a constituent element are coated with a solid solution or an intermetallic compound consisting of the constituent element constituting the core particles and ≥1 element selected from the group consisting of Group 2 elements of the periodic table except the constituent element, transition elements, Group 12 elements, Group 13 elements, and Group 14 elements except C and in that the nonaq. electrolyte is prepared by dissolving an organic acid anion Li salt into a highly nonoxidizable organic solvent. Therefore, gas is hardly produced even while the secondary cell is stored at high temps., and the secondary battery has a high energy d., excellent cycle life characteristics, and excellent high-rate charging/discharging characteristics.

IT 201536-28-9

RL: DEV (Device component use); NUU (Other use, unclassified); USES (Uses) (non-aqueous electrolyte secondary battery with improved anode and charging method)

RN 201536-28-9 CAPLUS

CN Borate(1-), bis[5-fluoro-2-(hydroxy-κO)benzenesulfonato(2-)κO]-, lithium, (T-4)- (9CI) (CA INDEX NAME)



● Li+

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:409584 CAPLUS

DOCUMENT NUMBER: 131:47168

TITLE: Nonaqueous electrolyte compositions

INVENTOR(S): Heider, Udo; Wenige, Roger; Pohl, Ludwig; Niemann,

Marlies; Jungnitz, Michael

PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany

SOURCE: Ger. Offen., 6 pp.

CODEN: GWXXBX
OCUMENT TYPE: Patent

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

DE 19757126 A1 19990624 DE 1997-19757126 19971220

19971220 DE 1997-19757126 PRIORITY APPLN. INFO.:

OTHER SOURCE(S): MARPAT 131:47168

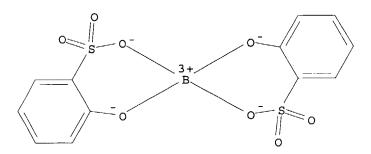
Nonaq. electrolyte compns. comprise ≥1 conductor compound dissolved AB in a mixture of ≥2 nonaq. solvents. The composition of the electrolyte lies in the range of +10 mol% to -10 mol% of eutectic electrolyte composition The electrolyte is suitable for primary or secondary batteries, a condenser, or a galvanic cell.

227099-53-8 IT

> RL: DEV (Device component use); USES (Uses) (nonag. electrolyte compns.)

RN227099-53-8 CAPLUS

Borate(1-), bis[2-(hydroxy-κ0)benzenesulfonato-κ0]-, lithium, CN(T-4) - (9CI) (CA INDEX NAME)



Li+

L20 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN

1998:95377 CAPLUS ACCESSION NUMBER:

128:117272 DOCUMENT NUMBER:

Lithium bis [5-fluoro-2-olato-1-benzenesulfonato(2-)-TITLE: O,O']borate(1-), a new anodically and cathodically

stable salt for electrolytes of lithium-ion cells

Barthel, J.; Schmidt, M.; Gores, H. J.

AUTHOR(S):

Inst. Theoretische & Physikalische Chemie, Univ. CORPORATE SOURCE:

Regensburg, Regensburg, D-93040, Germany

Journal of the Electrochemical Society (1998), 145(2), SOURCE:

L17-L20

CODEN: JESOAN; ISSN: 0013-4651

Electrochemical Society PUBLISHER:

DOCUMENT TYPE: Journal English LANGUAGE:

Synthesis, characterization, and electrochem. investigations of lithium bis[5-fluoro-2-olato-1-benzenesulfonato(2-)-0,0'] borate, a new salt for lithium-ion batteries in ethylene carbonate (EC)-di-Me carbonate (DMC) mixts. are presented. At platinum electrodes the anodic oxidation limit is .apprx.4.6 V, a value which is in good agreement with an estimation based on semiempirical quantum-mech. calcns. At aluminum electrodes its behavior is similar to that obtained for LiPF6/EC-DMC (1:1).

IT 201536-28-9P

RL: PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)

(synthesis, characterization, and electrochem. investigations of anodically and cathodically stable salt of lithium bis[5-fluoro-2-olato-1-benzenesulfonato(2-)-O,O']borate(1-) for electrolytes of lithium-ion batteries)

201536-28-9 CAPLUS RN

Borate(1-), bis[5-fluoro-2-(hydroxy-κ0)benzenesulfonato(2-)-CN κO]-, lithium, (T-4)- (9CI) (CA INDEX NAME)

• Li+

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1993:179996 CAPLUS

DOCUMENT NUMBER: 118:179996

TITLE: Image-forming method using toner containing boron

compound charge-controlling agent

INVENTOR(S): Hagiwara, Tomoe; Kuramoto, Shinichi; Orihara, Motoi

PATENT ASSIGNEE(S): Ricoh Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 04256963 A2 19920911 JP 1991-39420 19910208
PRIORITY APPLN. INFO.: JP 1991-39420 19910208

OTHER SOURCE(S): MARPAT 118:179996

GI

$$\begin{bmatrix} x^1 & & & & \\ & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ &$$

AB In an image-forming method in which many elec. microfield are formed on a developer-carrying substance and the latent images are developed with a

II

one-component type developer carried on the substance, which is prepared by optionally and externally adding adjuncts to a toner, the toner contains a binder resin, a coloring agent, and a B compound I and/or II [R1 = H, alkyl, alkoxy, halo, aromatic ring (including condensed ring); R2 = H, alkyl, alkoxy, halo; X1 = 0, S, SO3, SO2NR3, NR3; X2 = CO2, CONR3, SO3, SO2NR3, O, S, NR3; Y1-2 = 0, S, NR3 (R3 = H, alkyl); Z+ = cation; k, l, m, n = 1-4] as a charge-controlling agent. The method is able to form ≥ 2 toner layers uniformly and prevents toner-filming phenomena. Thus, styrene-acrylic copolymer, polypropylene, carbon black, and borodicatechol dimethylammonium were kneaded, pulverized, and mixed with colloidal silica to give a toner, which gave high d. images without fog in continuously repeated copying.

IT 146817-09-6

RL: USES (Uses)

(charge-controlling agent, electrophotog. developer toner containing)

RN 146817-09-6 CAPLUS

CN Borate(1-), bis[2-hydroxy-4-methylbenzenesulfonato(2-)-O1,O2]-, (T-4)-, hydrogen, compd. with N,N-dibutyl-1-butanamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 146817-08-5 CMF C14 H12 B O8 S2 . H CCI CCS

● H+

CM 2

CRN 102-82-9 CMF C12 H27 N

n-Bu | n-Bu-N-Bu-n

=>

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Executing the logoff script...

ACCESSION NUMBER: 2000:384640 CAPLUS

DOCUMENT NUMBER: 133:20102

TITLE: Non-aqueous electrolyte secondary battery with

improved anode and its charging method

INVENTOR(S): Iwamoto, Kazuya; Koshina, Hizuru; Shimamura, Harunari;

Nitta, Yoshiaki

PATENT ASSIGNEE(S): Matsushita Electric Industrial Co., Ltd., Japan

SOURCE: PCT Int. Appl., 35 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO. DATE
WO 2000033403	A1	20000608	WO 1999-JP6689 19991130
W: US			
RW: AT, BE,	CH, CY	, DE, DK,	ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
PT, SE			
JP 2000173652	A2	20000623	JP 1998-342887 19981202
JP 2000173589	A2	20000623	JP 1998-342888 19981202
EP 1052714	A1	20001115	EP 1999-973177 19991130
R: AT, BE,	CH, DE	, DK, ES,	FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, FI			
RITY APPLN. INFO	. :		JP 1998-342887 A 19981202

PRIORITY APPLN. INFO.: JP 1998-342887 A 19981202 JP 1998-342888 A 19981202 WO 1999-JP6689 W 19991130

The nonaq. electrolyte secondary battery is characterized in that the neg. plate is made chiefly of composite particles of which at least part of the core particles containing ≥1 kind among Sn, Si, and Zn as a constituent element are coated with a solid solution or an intermetallic compound consisting of the constituent element constituting the core particles and ≥1 element selected from the group consisting of Group 2 elements of the periodic table except the constituent element, transition elements, Group 12 elements, Group 13 elements, and Group 14 elements except C and in that the nonaq. electrolyte is prepared by dissolving an organic acid anion Li salt into a highly nonoxidizable organic solvent. Therefore, gas is hardly produced even while the secondary cell is stored at high temps., and the secondary battery has a high energy d., excellent cycle life characteristics, and excellent high-rate charging/discharging characteristics.

IT 201536-28-9

RL: DEV (Device component use); NUU (Other use, unclassified); USES (Uses) (non-aqueous electrolyte secondary battery with improved anode and charging method)

RN 201536-28-9 CAPLUS

CN Borate(1-), bis[5-fluoro-2-(hydroxy-κO)benzenesulfonato(2-)-κO]-, lithium, (T-4)- (9CI) (CA INDEX NAME)

● Li+

3

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER:

1999:409584 CAPLUS

DOCUMENT NUMBER:

131:47168

TITLE:

Nonaqueous electrolyte compositions

INVENTOR(S):

Heider, Udo; Wenige, Roger; Pohl, Ludwig; Niemann,

Marlies; Jungnitz, Michael

PATENT ASSIGNEE(S):

Merck Patent G.m.b.H., Germany

SOURCE:

Ger. Offen., 6 pp.

DOCUMENT TYPE:

CODEN: GWXXBX

LANGUAGE:

Patent

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

APPLICATION NO. DATE KIND DATE PATENT NO. -----_ - - -_____ DE 1997-19757126 19971220 DE 19757126 A1 19990624 PRIORITY APPLN. INFO.: DE 1997-19757126 19971220

OTHER SOURCE(S):

MARPAT 131:47168

Nonaq. electrolyte compns. comprise ≥1 conductor compound dissolved AB in a mixture of ≥2 nonaq. solvents. The composition of the electrolyte lies in the range of +10 mol% to -10 mol% of eutectic electrolyte composition The electrolyte is suitable for primary or secondary batteries, a condenser, or a galvanic cell.

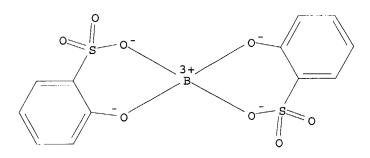
227099-53-8 IT

RL: DEV (Device component use); USES (Uses)

(nonaq. electrolyte compns.)

227099-53-8 CAPLUS RN

Borate(1-), bis[2-(hydroxy-κ0)benzenesulfonato-κ0]-, lithium, CN (T-4) - (9CI) (CA INDEX NAME)



ACCESSION NUMBER: 1998:95377 CAPLUS

DOCUMENT NUMBER: 128:117272

TITLE: Lithium bis[5-fluoro-2-olato-1-benzenesulfonato(2-)-

O,O']borate(1-), a new anodically and cathodically

stable salt for electrolytes of lithium-ion cells

AUTHOR (S): Barthel, J.; Schmidt, M.; Gores, H. J.

CORPORATE SOURCE: Inst. Theoretische & Physikalische Chemie, Univ.

Regensburg, Regensburg, D-93040, Germany

SOURCE: Journal of the Electrochemical Society (1998), 145(2),

L17-L20

CODEN: JESOAN; ISSN: 0013-4651

PUBLISHER: Electrochemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

Synthesis, characterization, and electrochem. investigations of lithium bis[5-fluoro-2-olato-1-benzenesulfonato(2-)-0,0'] borate, a new salt for lithium-ion batteries in ethylene carbonate (EC)-di-Me carbonate (DMC) mixts. are presented. At platinum electrodes the anodic oxidation limit is .apprx.4.6 V, a value which is in good agreement with an estimation based on semiempirical quantum-mech. calcns. At aluminum electrodes its behavior is similar to that obtained for LiPF6/EC-DMC (1:1).

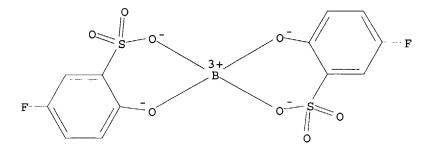
201536-28-9P

RL: PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)

(synthesis, characterization, and electrochem. investigations of anodically and cathodically stable salt of lithium bis[5-fluoro-2-olato-1-benzenesulfonato(2-)-O,O']borate(1-) for electrolytes of lithium-ion batteries)

201536-28-9 CAPLUS RN

Borate(1-), bis[5-fluoro-2-(hydroxy-κ0)benzenesulfonato(2-)-CNκO]-, lithium, (T-4)- (9CI) (CA INDEX NAME)



Li+

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT